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ABSTRACT

This study compared responses to three vignettes describing incidents between a male patient and a female nurse that involved the nurse being mildly assaulted, severely assaulted, or verbally abused (the control condition) by the patient. After reading each vignette, 32 of 42 female senior-year nursing students and 28 of 48 practicing nurses answered 13 questions, using a 5-point rating scale assessing the degree to which each nurse was responsible for the incident. Responses to the three vignettes were highly correlated. The response levels to a given vignette could be predicted from a respondent's response to the other vignettes. No significant differences were found between vignette types. In general, the v-shaped non-linear response pattern where female nurses were blamed more for the incident in which a mild assault occurred than in the severe assault or control incident was confirmed in all analyses that cross-validated the results of the authors' previous studies, in which subjects responded to only one vignette. Data on subjects' age, years of job experience, prior assault history, and belief in a just world scores did not significantly correlate to any of the three vignette scores. The results strongly confirm those of the authors' previous research and support the blaming catastrophe phenomenon. Nine tables and a 21-item list of references are included. (RLC)

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FURTHER FINDINGS ON NON-LINEAR PATTERNS OF THE BLAMING OF PROFESSIONALS FOR INCIDENTS OF AGGRESSION AND ASSAULT

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Further Findings on Non-Linear Patterns of the Blaming of Professionals for Incidents of Agression and Assault.

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Abstract

The present study compared all possible orders of responding to three vignettes which described incidents between a male patient and a female nurse which involved the female nurse being milding assaulted, severely assaulted, or verbally abused by the patient which was a control condition. Subjects in the present study were 32 female senior year nursing students and 28 practicing nurses. Data on age, years of experience, prior assault history and belief in a just word were also collected after subjects responded to each of the three vignettes in the responding order randomly assigned to them.

Although non-response rates were a problem in the present study, a variety of data and analyses were present to support the view that the non-response rate problems were minimal empirically at worst. It was found that responses to the three vignettes were highly correlated and that the response levels to a given vignette could be predicted a respondent's response to the other vignettes with two important caveats. First, no significant effect was observed due the the 6 possible orders in which a subject could respond to the three vignettes, but a significant "bench marking" order effect was found. This "bench marking effect" was that if a subject responded to the mild assault vignette first, the subject's overall response pattern "best fit" the general non-linear assignment of blame pattern observed, but if the subject responded to the severe assault or control (verbal abuse only) vignette first, this vignette set a "bench mark" for responding from which the subject's subsequent response did not deviate greatly which slightly distorted the subject's "V-Shaped" non-linear response pattern.

In general the "V-Shape non-linear response pattern" where female nurses were blamed more for the incident in which a mild assault occurred than in the severe assault or control (verbal abuse only) incident was confirmed in all analyses which cross-validated the results of our previous studies in an experimentally strong design as subjects in our previous studies had responded to only one vignette.

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Assaults on professionals by clients (and similar acts of aggression) are increasing being recognized as a serious professional and work-related problem, in terms of both the assignment of blame and responsibility for the assault incidents and the effects of the incident on the assault victim (Tardiff and Koenigsberg, 1985; and Binder and McNeil, 1986). In particular, assaults of nurses by patients has been on the rise, and hospital emergency rooms and outpatient clinics are now considered to be high risk work areas (Carmel and Hunter, 1989). The effects of aggressive and assaultive behavior on nursing profession in the past decade has been considerable, moreover, and similar statistics and effects may be cited concerning teachers and students (Henkin, 1990).

Investigating aggressive and assaultive behavior is a difficult task for a variety of reasons. Most obvious among these reasons is the simple fact that researchers cannot purposely stage or cause various types of aggressive or assaultive incidents to occur to study in a systematic and controlled fashion. Given this point, vignettes have proved to be a particularly useful and successful prospective experimental method for researching and assessing various aspects of aggressive and assaultive behaviors, and the manner in which people assign blame, because vignettes may be careful constructed to vary features and attributes of situations and control vignettes may also be used.

Vignettes

We have developed and validated a series of six vignettes for studying assaults of nurses by patients (Carifio and Lanza, 1989). These six vignettes vary the sex of the nurse practitioner in the vignette (female or male) and the severity of the incident between the patient and the nurse in the vignette (i.e., verbal abuse only, mild assault, or severe assault of the nurse by the patient) to give a fully crossed (2x3) design. The patient in all six of these vignettes was male. Subjects respond to these vignettes using a standardized 13 item 5 point rating scale which allows the assessment of both direct and indirect assignment of blame for the incident described in the vignette. It should be noted that the verbal abuse (i.e., verbal aggression only) vignette is the control condition and baseline vignette for studying subject responses to the mild and severe assault vignettes.

The reliability and validity evidence that has been obtained for these six vignettes is excellent and extensive (see Carifio and Lanza, 1989). The 13 item rating scale subjects used to respond to the vignettes was found to have two underlying, but correlated, factors (using communalities in the diagonals and an eigen cut-off value of 1.0) that accounted for 72% of the variance observed in the sample (N=58). These two factors were Personal Blame and Blame as Perceived by Fellow Workers. As the two factors were correlated (r=+.52), a Total Blame score, which is a simple

summation of all 13 items, is typically used in most analyses we conduct with the scale.

The Cronbach internal consistency coefficient for the 13 vignette rating items was r=+.91 (N=64), and the one week test-retest reliability coefficient was r=+.86 (N=55). These reliability coefficients were the same across all variations of the vignettes used. All 13 items significantly predicted total blame score with both the median and mean item total correlation being r=+.70 (N=64). Item total correlations ranged from .36 to .89 with 10 of the 13 item total correlations being above .70. Total Blame scores, moreover, were also found to correlate with age at r=+.31 (N=58,p.<.01), job experience at r=+.20 (N=58,p.<.10) and with score from the Rubin and Peplau (1973) Just World Scale at r=+.54 (N=55,p.<.01). The level of these concurrent validity coefficients were about as predicted from theory and the literature.

A panel of 12 judges (6 nurses, 3 psychologists, and 3 psychiatrists) rated each of the six vignettes in random order using the Verbal Aggression and Physical Aggression subscale items of the Yudofsky (1986) Overt Aggression Scale (see Lanza and Carifio, 1992 for details). The inter-judge agreement was r=+.94, and the judges ratings discriminate the control (verbal abuse only), mild and severe assault vignettes from each other with ratio level mean differences. None of the judges rated either version of the control vignette as having any physical assault present in the vignette. As may be ascertained from all of the results presented above, the 6 vignettes we developed are quite good psychometrically.

Initial Results

Responses were obtained to our six vignettes from 66 practicing nurses who were randomly assigned a single (one) vignette to read and answer questions. In this study, both female and male nurses were blamed as much for the incident that occurred with the patient in the control (verbal abuse only) vignettes as they were in the severe assault vignette, but they were blamed more in the mild assault vignette than they were in either the control or severe assault vignette. Female nurses, however, were blamed more than male nurses for the incident in the control and severe assault vignette, but not in the mild assault vignette. These complex findings were shown to fit the non-linear elliptic umbilic model of catastrophe theory (Zeeman, 1976), and not the linear models and interpretations of these variables currently in the literature.

A re-review of the literature of aggression and assault found a wide variety of evidence to support non-linear dynamics and non-linear patterns of blame attribution. Using catastrophe theory as a general model and perspective of non-linear dynamics and behavior, a specific theoretical model was generated to explain our finding of professional nurses being blamed most for incidents involving mild assaults (or

infractions). This theoretical model is outlined later in this paper.

Although very surprising, seminal, and strongly suggestive, the data from our initial studies left several important questions unanswered empirically, as subjects had responded to only one of the six vignettes we had constructed. Among these questions were "What were (or would be) the correlations between subject responses to each of these vignettes; Would the order in which the vignettes were responded to have an effect on the type of responses made; Were experienced nurses responses to these vignettes different than other adults; and, Could we replicate our initial surprising results with another sample of nurses." The purpose of the present study, therefore, was to answer these and other questions.

Methodology

As examining the effects of all possible combinations of the 6 vignettes at once would require too many subjects (and be too much for each subject to do), only the the control (verbal abuse only), mild and severe assault vignettes in which the nurse practitioner was female and the patient was male were used in this study. These three vignettes were given in all possible (i.e., 6 different) orders randomly to 42 female senior year nursing students at a public university in the northeast and to 64 female experience nurses at a veteran's hospital in the northeast. Personal background data (age, education level, job area, sex, and years of experience), and responses to Rubin and Peplau's (1973) Just World Scale were also collected. Additionally, a six item Patient Assault History Scale was developed and administered so that subject's could be classified in terms of patient assault experience from none to a great deal and from first hand experience of mild assault or/and severe assault for analytical purposes.

Basically, the vignettes used in all of our studies including the present one described a somewhat casual conversation about a patient's weekend pass between a nurse (female in the present study) and a patient (male) who occasionally hit people. The patient inadvertently tells the nurse that he is going home on a two day weekend pass. It is the nurse's understanding, however, that a one day pass has been approved for the patient by his treatment team, and when this fact is related to the patient, the patient becomes hostile and verbally aggressive towards the nurse. The nurse then tries to calm the patient down by suggesting that they discuss the matter.

The three different treatment conditions used in the present study varied in terms of the ending used to this vignette; namely, in terms of what happened from this point forward in the vignette.

In the Control (verbal aggression only) vignette the patient tells the nurse aggressively what the nurse "can do" and where the nurse "can go," and then abruptly turns and

walks away, ending the vignette.

In the Mild Assault vignette, the patient aggressively tells the nurse what the nurse "can do" and where the nurse "can go," and then grabs the nurse very hard by the wrist and will not let go. The nurse needs help to get free from the patient and the nurse's wrist has a reddened mark on it after the incident is all over, which is the end of the vignette.

In the Severe Assault condition, the patient aggressively tells the nurse what the nurse "can do" and where the nurse "can go," and then grabs the nurse very hard by the wrist and starts punching the nurse on the arm. The nurse loses her or his balance, falls, and hits her or his head against the wall. When help arrives, the nurse is bleeding from several head cuts and has a severely sprained arm and wrist, which is the end of the vignette.

As previously stated, after reading each version (control, mild, or severe assault) of the above vignette, the subject answers 13 questions, using a five point rating scale, which assessed the degree to which the professional nurse was responsible (to blame) for the incident that occurred. The order in which the data were collected in the present study were responses to the three vignettes first (in one of the 6 random orders), then the personal background data and the Patient Assault History Scale and lastly the Just World scale.

All of the scales described above were given to each respondent in an envelope to do when they had time and then return to us when completed. As participation in this study was voluntary and the packages had to be returned to us when completed (as they took some time to complete, a number of subjects did not return completed packages to us. Only 32 of the 42 senior nursing students (76.2%) and 28 of 48 experienced nurses (58.3%) returned completed packages. This non-response rate had two major effects on the data. First, it caused unequal N's in terms of the 6 different orders of the 3 vignettes to which each subject responded making the randomization that we attempted to achieve on this design variable questionable at best. Second, the degree to which the background variables we collected data on were randomized within each group was also questionable. This potential non-randomness within each subgroup would effect mean levels and the correlations between variables as well as the consequent assessment of effects derived from these indices. To compensate for these problem, we did a preliminary set of analyses to assess the degree to which randomizations were or were not achieved probabilistically by the methodology we employed and the resultant non-response rates that occurred in this study. The results of these analyses are presented below along with a description of the characteristics of the subjects in the present study and their similarity to subjects in our previous studies prior to the presentation of our main results and findings.

Results

Table 1 presents the means, standard deviations and t values for the senior year nursing students (N=32) and the experiences nurses (N=28) in the present study on key background variables. As can be seen from Table 1, senior year nursing students and experience nurses significantly differed from each other in terms of age ($t=5.3$, $df=59$, $p.<.001$) and years of nursing experience ($t=4.9$, $df=59$, $p.<.001$), but did not significantly differ from each other in terms of scores of the Just World Scale and scores on the Assault History Scale at either the total score or item score level. The average age of senior nursing students was 30.1 year, whereas the average age of the experienced nurses was 44.4 years. The average number of years of experience for the senior nursing students was 6.2, whereas the average number of years of nursing experience was the experienced nurses was 17.6. It should be noted that approximately one third of the senior nursing students in this study had some nursing experience (i.e., were not inexperienced). This result is due to these nursing students being students who had an associate degree in nursing returning to school after working for awhile to complete their BA degree. The lack of significant differences on the Just World Scale and the Assault History Scale total and items is evidence to support that these variables are similar (randomized) in each group and that the effects of the non-response rates do not seem to be significant.

Table 2 presents a summary of F-ratios for a severity of incident in the vignette (control, mild, or severe) by Group (senior nursing students versus experienced nurses) 3x2 ANOVA's that were done on just world score, assault history scores, age, and years of experience. As can be seen from Table 2, no significant differences (or interactions) were found between vignette types on any of these 4 variables which is further evidence to support that these 7 variables are similar (randomized) in each group and that the effects of the non-response rates do not seem to be significant. Other evidence will be presented below to support this point.

The Cronbach internal consistency coefficient for the 13 vignette rating items across all three vignettes was $r=+.83$ ($N=180$). The Cronbach alpha coefficients were approximately the same for each version of the three vignettes used (control, mild and severe). These alpha coefficients are not significantly different from those found in the original studies we did (see Carifio and Lanza, 1989).

The 13 item rating scale subjects used to respond to the the three vignettes was found to have two underlying, but correlated, factors (using communalities in the diagonals and an eigen cut-off value of 1.0) that accounted for 61% of the variance observed in the sample ($N=180$). These two factors again were Personal Blame and Blame as Perceived by Fellow Workers. As the two factors again were highly correlated ($r=+.66$), a Total Blame score, which is a simple summation of all 13 items, was used for analyses. Again, the alpha

coefficients and factor analysis results support the view that the non-response rates observed do not seem to have significantly impacted the data.

Table 3 presents the intercorrelations between the major variables scrutinized in the present study. As can be seen from Table 3, the correlations between the control, mild, and severe assault vignettes ranges from r=+.73 (control to mild) to r=+.85 (mild to severe). These intercorrelations between subjects responses to the three vignettes are not only highly significant and very high correlations between variables that are measured using a 13 item scale, but also answer a major question that was not answered in our previous studies. Responses to any one of the three vignettes are predictable from a subject's response to one or both of the other vignettes. Further, there is a consistency in the pattern of a subject's responses across the three vignettes as is indicated by the nature of the intercorrelations observed between the three vignettes. It should be noted, however that his pattern of response is non-linear in character, as will be seen below.

Total Blame scores on the three vignettes, as can be seen from Table 3, were found not to correlate with age, job experience, assault history (a new finding it should be noted), or with scores from the Rubin and Peplau (1973) Just World Scale. These findings (with the exception of assault history) are the direct opposite of what we found in our initial studies and may be due to the differences in samples and/or sample compositions of the two studies, or to the effects of non-response rates and subject losses in the current study. Unfortunately, it is extremely difficult to determine which of these later factors is the primary cause of these results.

The age and years of experience in the current sample is significantly and considerably lower than the prior samples. The mean levels of Just World Scale scores, however, do not significantly differ. Mean levels of blame attribution for each of the three vignettes were significantly lower in the present study than in previous study. Age, work experience and assault history, on the other hand, are weakly related multivariately to responses to each of the three vignettes (see Table 9). The assault histories of subjects in our prior studies, however, were not known. Given all of these factors, it is our opinion that the general trends observed in our data (which are the same as in previous studies) are accurate, correct, and valid, but that caution needs to be exercised in interpreting results at fine-grained levels of analysis. Further evidence to support this view will be given below.

Table 4 presents the results on a one-way repeated measures ANOVA on the three vignette scores by the six responding order combinations investigated in the present study. As can be seen from Table 4, there was a highly significant main effect ($F=10.52$, $p.<.001$) between the three vignette type (control, mild and severe), but no significant

effect due to order of responding to the three vignettes. As examination of the cell means in Table 4, however, will reveal two major points. The first point is that the mean levels between the three vignettes is non-linear; namely, respondents (all of whom were female in this study) blamed the female nurse for the incident that occurred with the patient in the mild assault vignette more than for the incident that occurred in the control (verbal abuse only) or the severe assault vignettes. This non-linear pattern is essentially the same as the pattern that was observed in our original study, only the mean levels are lower (see Table 5 for details). The occurrence of this non-linear pattern, moreover, can be explained by Catastrophe theory (Zeeman, 1972) which is done below. Further, the specific and actual statistical significance of this non-linear trend will be given later, when the data are broken down at a finer level of analysis.

The second point that needs to be observed from Table 4 is that which vignette a subject responded to first does have an effect of a kind on the subject's response pattern. As can be seen from Table 4, the mean level of responses and the trend of response are in part "driven" by which vignette a subject responds to first. Subjects who respond to the mild assault vignette first conform more to the non-linear blame attribution pattern than subjects who respond to the control or severe assault vignette first.

This pattern or result is due in part to the "semi-artificiality" of the responding situation and the type of response set it seems that it might be inducing in subjects. One does not typically respond to three "abuse situations" in a row back to back in the space of a couple of minutes where one can check one's previous responses. Consequently, if one rates the severe assault situation first at a particular level, then it would seem from the data that this rating may be setting a psychological "bench mark" in terms of one's rating of the mild and control vignettes. This "bench marking" effect in terms of the making of these kinds of judgements may be an important finding in and of itself, and one deserving of further research and investigation, but in terms of the present study, it is both a noise and a nuisance variable relative to analyzing and interpreting the data collected relative to the questions being addressed. Therefore, given these points, the data for the 6 responding orders were reduced to 3 "types of responding orders" or categories by combining response order categories in terms of which vignette type the subject did first; namely, control, mild or severe. Reducing the order variable to 3 categories which indicate which vignette the subject responded to first also increased the cell N's for analyses, and all subsequent analyses involving "response order" are reported using revised definition of responding order.

Table 6 presents the results of a one-way repeated measures ANOVA on the three vignette scores by the three "collapsed" responding order combinations described above.

As can be seen from Table 6, there was a significant main effect (F=10.97, p.<.001) between the three vignette types (control, mild and severe), and a significant main effect (F=3.42, p.<.01) due to the type of vignette responded to first as described above. The results presented in Table 6 support the points made above concerning the "bench marking" effect that seems to be operating due to the type of vignette a subject responds to first.

Table 7 presents the results of a one-way repeated measures ANOVA on the three vignette scores by years of nursing experience (none or some). As can be seen from Table 7, there was a significant main effect (F=11.14, p.<.001) between the three vignette type (control, mild and severe), but no significant main effect in terms of years of prior experience. The non-linear trends in terms of the pattern of blame attribution in very clear in Table 7 for those respondents who had no prior experience nursing. Those respondents who had nursing experience, however, blamed the nurse in the control (verbal abuse only) vignette slightly more than those respondents without first hand work experience and the nurse in the severe assault vignette significantly less. Both the effects of work experience (i.e., the occurrence of increased professionalization psychologically) and the theoretical view presented at the end of this paper can explain these results.

Table 8 presents the accompanying one-way trend analyses for the assignment of blame mean levels given in Table 7. Three one-way trend analyses are presents as there are three "rows" or trends in Table 7. As can be seen from Table 8, all of the non-linear trends in the data given in Table 7 are very highly significant at the .001 level as they are in all of the Tables that have been presented.

Table 9 presents the results of a one-way repeated measures ANOVA on the three vignette scores by the number of times the respondent had been assaulted on the job in the past. As can be seen from Table 9, there was a significant main effect (F=9.21, p.<.001) between the three vignette type (control, mild and severe), but no significant main effect in terms of the number of times that respondents had been assaulted on the job in the past. The non-linear trends in terms of the pattern of blame attribution in the data presented in Table 8 is both clear and consistent across the number of times assaulted on the job levels. That female nurses are blamed more for mild assaults or "professional infractions" than severe assaults or "low level" incidents or "professional infractions" is a highly significant non-linear pattern of blame attribution that should be clearly noted by all professionals and those who judge professionals. It is this "inverted V-Shaped pattern" in the assignment of blame that has been the constant pattern in all of our data and analyses.

Discussion

Although non-response rates were a problem in the present study, a variety of data and analyses were present to support the view that the non-response rate problems were at worst minimal empirically in terms of their effects on the data and the main results or findings. Given this point and view, it was found that responses to the three vignettes were highly correlated to each other, and that the response levels to a given vignette could be predicted from a respondent's response to the other vignettes with two important caveats. First, no significant effect was observed due the the 6 possible orders in which a subject could respond to the three vignettes, but a significant "bench marking" order effect was found. This "bench marking effect" was that if a subject responded to the mild assault vignette first, the subject's overall response pattern "best fit" the general non-linear assignment of blame pattern observed, but if the subject responded to the severe assault or control (verbal abuse only) vignette first, this vignette set a "bench mark" for responding from which the subject's subsequent response did not deviate greatly, which slightly distorted the subject's "V-Shaped" non-linear response pattern.

In general the "V-Shape non-linear response pattern" where female nurses were blamed more for the incident in which a mild assault occurred than in the severe assault or control (verbal abuse only) vignette was confirmed in all analyses, which cross-validated the results of our previous studies in an experimentally strong design as subjects in our previous studies had responded to only one vignette. What we have called the "blaming catastrophe" phenomenon we believe is strongly support from the results of two studies. Professional are blamed more severely for mild "infractions" or incidents than they are for severe or "low level" or severe incidents or "infraction". This pattern of blame attribution is counter-intuitive.

Age, years of job experience, prior assault history (a new finding), and belief in a just world scores did not significantly correlate to any of the three vignette scores for subjects in the present study. These results (with the exception of prior assault history) were the exact opposite of our prior study. The mean response levels of subjects in the present study for each of the three vignettes were lower than in our previous study, although the basic non-linear pattern was the same. We attribute these differences to differences in samples and sample composition as well as to the much lower N's in our first study (see Table 5). Another larger and somewhat better controlled study and replication of this study would greatly help to settle any doubts about the findings of this study and our previous studies.

Lastly, a word needs to be said about the "inverted V-Shape non-linear pattern" that we have consistently found in the attribution of blame in our vignette. This non-linear patterns requires a non-linear theory to explain it such as Zeeman's (1972) Catastrophe theory. In the main, non-linear

theories and data patterns essentially describe the action or effects of two or more logically contradictory or opposing factors (variables) on the dependent variable of interest. When one of the two factors "dominates," or is present or absent to a great degree, bimodal results or "outcome states" will be observed as in the control (verbal aggression only) and severe assault conditions in our original study (see Table 5). In a non-linear function, when both factors are present equally, they do not neutralize or cancel each other out (as in balance theory), but rather they produce a "jump" in the level of the dependent variable as seen in the mild assault condition in the data in our orginal study and in this study. This phenomenon may be both seen and understood by examining all of the data present in Table 5 which gives the results of both of the studies we have done.

A clinical understanding and explanation of the points and the results given in Table 5 is that a mild assault situation is within the range of expected professional functioning (and span of control) for the professional nurse, whether male or female. Typical nurse behavior related to a mild assault situation, include the assessment of patient aggressive potential, making predictions about the likelihood of assaultive behavior, and intervening in the actual assault. In terms of professional guidelines (or judging crtieria), male and female nurses are held equally accountable for their performance in such situations. Consequently, gender bias disappears and the amount of causal blame assigned to the nurse increases to its highest level in the mild assault situation.

Carmel and Hunter (1989) cite empirical evidence to support the view that there are "contradiction zones" between professional expectations and specific incidents and situations in the area of nursing. Male nurses are expected and tend to become actively involved in containing very violent behavior, whereas female nurses tend to be selectively excused from such activities. All nurses, however, regardless of sex, are expected to become involved in containing and appropriately managing aggressive and mildly violent patients. These selective and differential expectations and differences in everyday practices, therefore, set up a contradiction dynamic in the process of making judgements about the assignment of blame in different situations.

Catastrophe predicts that gender bias and its effects in the differential attribution of blame will manifest itself most in low and high conditions of aggressive and assaultive behavior, but will not be observed in mid-range conditions. The theory, however, also predicts that the professional nurse will be blamed most in the mid-range (mild assault) condition as this is the "catastrophe' (jump point) in terms of the two contradictory factors (professionalism versus gender bias) affecting the attribution of blame. Our data supported these predictions of catastrophe theory which would not have been observable if we did not use control vignettes.

Both specifically and in terms of overall predicted data patterns, the results of the present study strongly confirmed the results of our intial studies and the theory we have developed and elaborated to explain these results.
The "blaming catastrophe" phenomenon is strongly support from the results of our studies. There is most probably no one who has not observed or experienced first hand an evaluation or blaming "catastrophe" of the kind depicted in our studies, when one pauses to closely examine one's obsevations and first hand experiences, which is a subjective, qualitative, first hand, and rich validation of our findings and they.

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Table 1: Means, Standard Deviations and T Values Between Senior Nursing Students (N=32) and Practicing Nurses (N=28).

	Senior Nursing Students			Practicing Nurses				
Variable	N	Mean	SD	N	Mean	SD	t	p
Age	32	30.1	11.4	28	44.4	10.2	5.3*	<.001
Yrs. Exper.	32	6.2	10.1	28	17.6	8.8	4.9*	<.001
Tot. Assault History	32	8.5	2.8	28	9.8	3.3	1.7	<.10
*Times Asslt	32	2.0	1.1	28	2.3	1.1	1.2	>.05
*Sev. Injury	32	1.4	0.5	28	1.6	0.7	1.5	>.05
*days out	32	1.0	0.1	28	1.2	0.7	1.6	>.05
*recov. time	32	1.2	0.5	28	1.4	0.9	1.0	>.05
*Emotion Lev.	32	1.8	1.0	28	2.2	0.9	1.6	>.05
*Amt. Treat.	32	1.1	0.8	28	1.1	0.7	1.0	>.05
Just World	32	70.6	5.3	28	68.9	6.6	1.1	>.05

*Items that compose Assault History Scale

Table 2: Summary of F-Ratios for Severity of Incident in the Vignette by Group (3x2) ANOVA on Total Just World Scale Scores, Total Assault History Score, Age, and Prior Years of Experience (N=60).

Source	df	Just World	Assault History	Age	Years Experience
Group (A)	1	2.39	2.31	14.89*	14.95*
Vignette Type (B)	2	0.29	0.26	1.42	0.95
A xB	2	0.26	0.03	0.04	1.26
Error	54				

*=P<.001

Table 3: Intercorrelations Between the Three Vignettes and other Variables (N=60).

	MAV	SAV	JW	Age	AE	YE
Control V. (CV)	.73*	.83*	.07	-.11	-.10	.08
Mild As. V. (MAV)	1.00	.85*	.15	-.06	-.14	.05
Severe As. V. (SAV)		1.00	.00	-.14	-.07	.04
Just World (JW)			1.00	.00	.29*	.05
Age (Age)				1.00	.06	.82*
Assault Exper.(AE)					1.00	.32*
Years Exper. (YE)						1.00

*=p<.01

Table 4: One Way Repeated Measures ANOVA on Total Blame of the Nurse in the Incident Scores by the Six Orders of Responding of the Vignettes (N=60).

Severity of Incident in Vignette

Vignette Response Order	(Verbal Abuse) Control			Mild Assault			Severe Assault		
	N	Mean	St.D.	N	Mean	St.D.	N	Mean	St.D
MSC	17	27.4	6.7	17	29.9	7.1	17	24.6	5.5
MCS	13	28.4	7.3	13	29.9	6.6	13	25.5	7.5
CSM	6	31.0	9.6	6	29.2	10.2	6	27.8	8.6
CMS	8	27.4	6.2	8	28.0	6.7	8	24.1	4.1
SMC	9	28.2	8.2	9	28.4	6.3	9	28.4	10.0
SCM	7	28.7	6.4	7	32.7	6.5	7	28.7	6.5
Total	60	28.2	7.2	60	29.7	7.6	60	26.1	7.3

Source	df	Mean Sq.	F	p
Between Groups				
Order (A)	5	45.03	0.35	>.05
Error	54	128.30		
Within Groups				
Vignette Type (B)	2	133.59	10.52*	<.001
A by B	10	15.84	1.25	>.05
Error	108	12.70		

Table 5: Mean Response Levels by Vignette Type for the Current and Previous Study Conducted.

	Severity of Incident in Vignette								
	(Verbal Abuse) Control			Mild Assault			Severe Assault		
Study	N	Mean	St.D.	N	Mean	St.D.	N	Mean	St.D.
Current Study									
Female Nurse	60	28.2	7.2	60	29.7	7.6	60	26.1	7.3
Prior Study									
Female Nurse	9	35.2	9.4	7	38.4	12.6	13	34.1	7.5
Male Nurse	8	29.6	11.0	9	39.8	9.7	12	29.6	9.4
Total	17	32.6	10.3	16	39.3	10.7	25	32.0	9.4

Table 6: One Way Repeated Measures ANOVA on Total Blame of the Nurse in the Incident Scores by the Six Orders of Responding of the Vignettes (N=60).

	Severity of Incident in Vignette								
Vignette Response	(Verbal Abuse) Control			Mild Assault			Severe Assault		
Order	N	Mean	St.D.	N	Mean	St.D.	N	Mean	St.D
Control First	17	28.4	7.4	17	29.1	6.1	17	25.2	6.1
Mild First	28	27.6	7.2	28	30.1	6.9	24	24.8	6.5
Severe First	15	29.1	6.8	15	29.5	6.3	6	29.6	8.1
Total	60	28.2	7.2	60	29.7	7.6	60	26.1	7.3

Source	df	Mean Sq.	F	p
Between Groups				
Order (A)	5	65.76	0.53	>.05
Error	54	128.30		
Within Groups				
Vignette Type (B)	2	131.62	10.97*	<.001
A by B	10	40.99	3.42*	<.01
Error	108	11.99		

Table 7: One Way Repeated Measures ANOVA on Total Blame of the Nurse in the Incident Scores by Years of Nursing Experience (None or Some).

	Severity of Incident in Vignette								
	(Verbal Abuse) Control			Mild Assault			Severe Assault		
Nursing Experience	N	Mean	St.D.	N	Mean	St.D.	N	Mean	St.D
None	15	27.6	8.6	15	30.9	7.6	15	27.5	9.2
Some	45	28.4	7.2	45	29.3	6.7	45	25.7	6.1
Total	60	28.2	7.2	60	29.7	7.6	60	26.1	7.3

Source	df	Mean Sq.	F	p
Between Groups				
Experience (A)	1	25.77	0.21	>.05
Error	58	128.30		
Within Groups				
Vignette Type (B)	2	141.89	11.14*	<.001
A by B	2	24.98	1.96	>.05
Error	116	12.73		

Table 8: One-Way Trend Analyses of Incident in the Vignette by Amount of Prior Nursing Experience (none or Some) on Total Blame of the Nurse for the Incident Scores (N=60).

Trend Factor	Source	df	Mean Sq.	F	p
No Experience	linear	1	15.79	0.23	>.05
	non-linear	2	893.73	13.12	<.001*
	error	12	68.12		
Some Experience	linear	1	12.39	0.17	>.05
	non-linear	2	694.15	9.31	<.001*
	error	41	74.56		
Both Groups Combined	linear	1	20.32	0.25	>.05
	non-linear	2	1503.00	18.42	<.001*
	error	57	81.63		

Table 9: One Way Repeated Measures ANOVA on Total Blame of the Nurse in the Incident Scores by Number of Times the Respondant Had Been Assaulted on the Jb (N=60)

	Severity of Incident in Vignette								
# of Times Respondant Assaulted	(Verbal Abuse) Control			Mild Assault			Severe Assault		
	N	Mean	St.D.	N	Mean	St.D.	N	Mean	St.D
None	19	29.7	8.6	19	31.9	8.9	19	28.0	6.1
1-3 times	24	28.1	6.1	24	29.0	5.3	24	24.9	5.4
4-6 time	10	26.7	7.5	10	28.7	9.8	10	26.1	8.0
10+ times	5	28.8	3.96	5	30.2	7.4	5	26.6	3.4
Total	60	28.2	7.2	60	29.7	7.6	60	26.1	7.3

Source	df	Mean Sq.	F	p
Between Groups				
Order (A)	3	48.67	0.40	>.05
Error	54	121.97		
Within Groups				
Vignette Type (B)	2	126.12	9.21*	<.001
A by B	6	3.39	0.24	>.05
Error	108	13.70		